

09/781891

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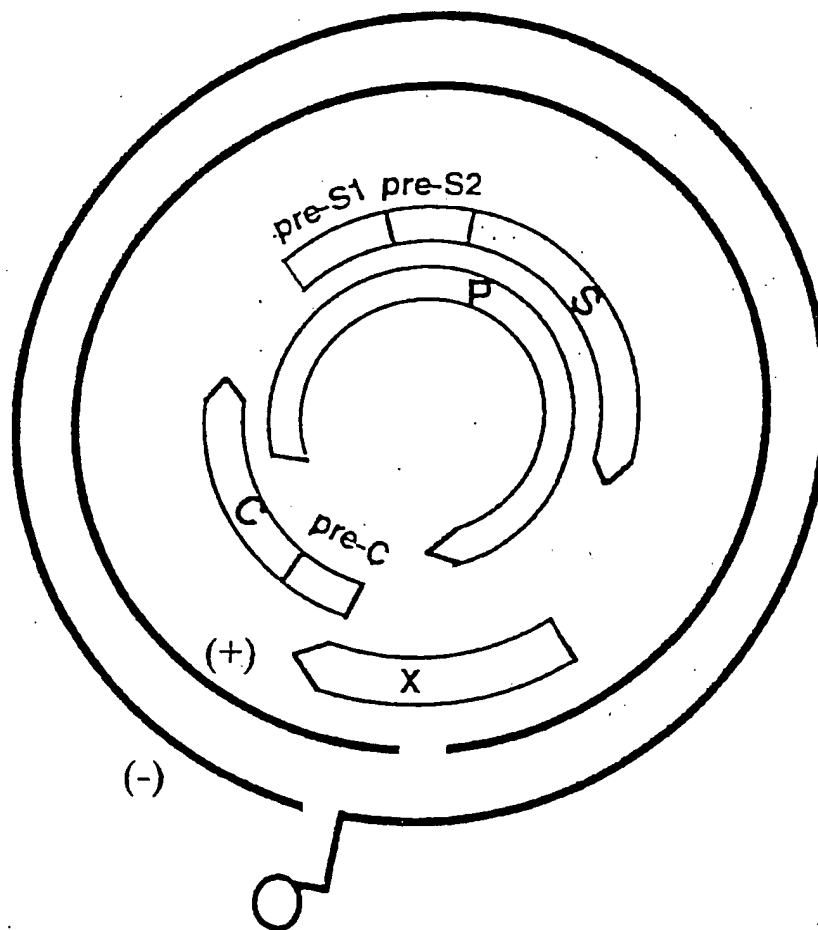


Figure 1A

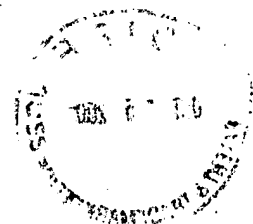
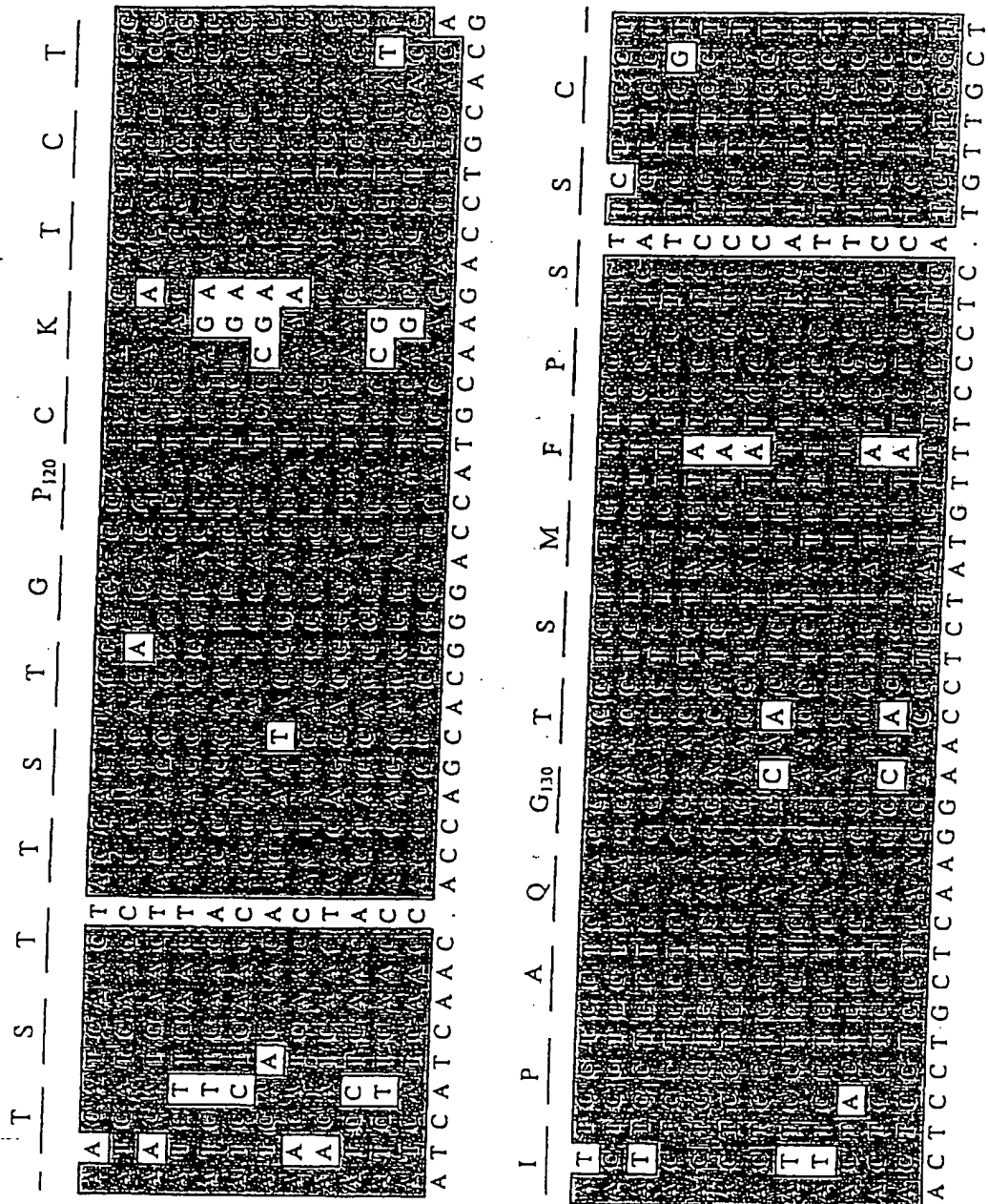


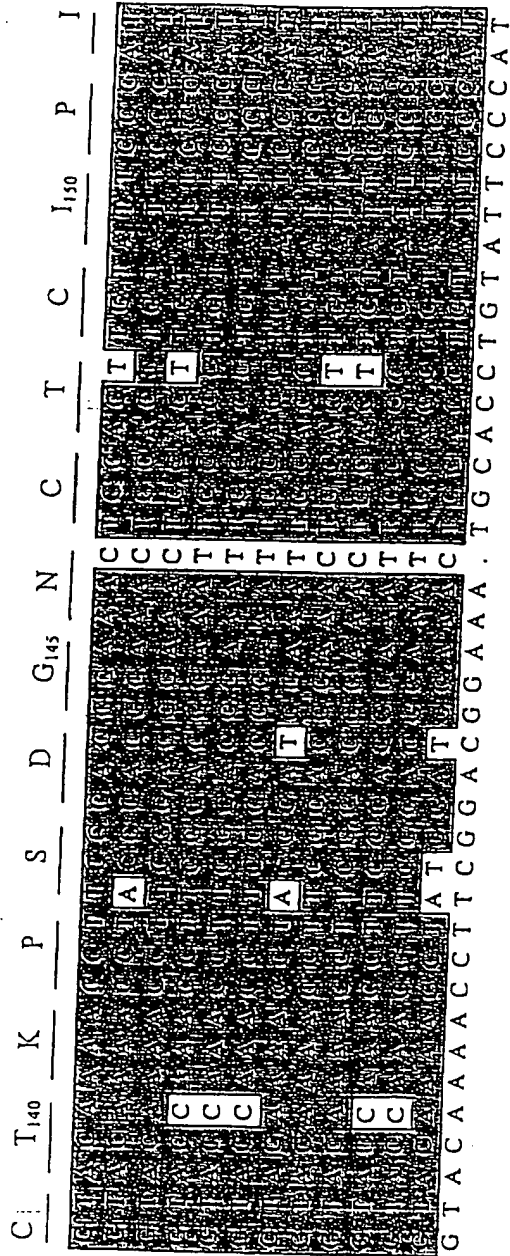
Figure 1B

Figure 3

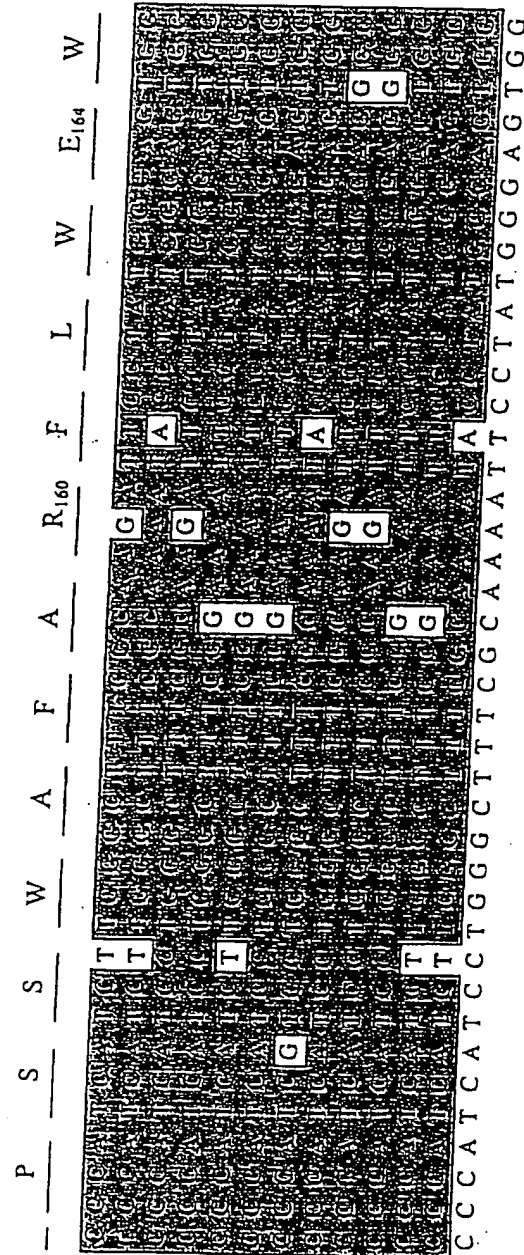


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 221500/HPBCG
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 59439/HBVAYWE
 59429/HBVAYWC
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 59408/HBVADRM
 59404/HBVADR4
 329640/HPBAYW
 313780/HBVAYWMCG
 229417/HPBADW1

329616/HPBADR1CG
 221499/HPBADW3
 221500/HPBCG
 62280/XXHEPAV
 59439/HBVAYWE
 59429/HBVAYWC
 59418/HBVADW2
 59408/HBVADRM
 59404/HBVADR4
 329640/HPBAYW
 313780/HBVAYWMCG
 229417/HPBADW1



*329616/HPBADR1CG
221499/HPBADW3
221500/HPB8CG
62280/XXHEPAV
59439/HBVAYWE
59429/HBVAYWC
59418/HBVADW2
59408/HBVADRM
59404/HBVADR4
329640/HPBAYW
313780/HBVAYWMCg
229417/HPBADW1



*329616/HPBADR1CG
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221500/HPB8CG
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59439/HBVAYWE
59429/HBVAYWC
59418/HBVADW2
59408/HBVADRM
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329640/HPBAYW
313780/HBVAYWCMG
229417/HPBADW1

Figure 3 continued

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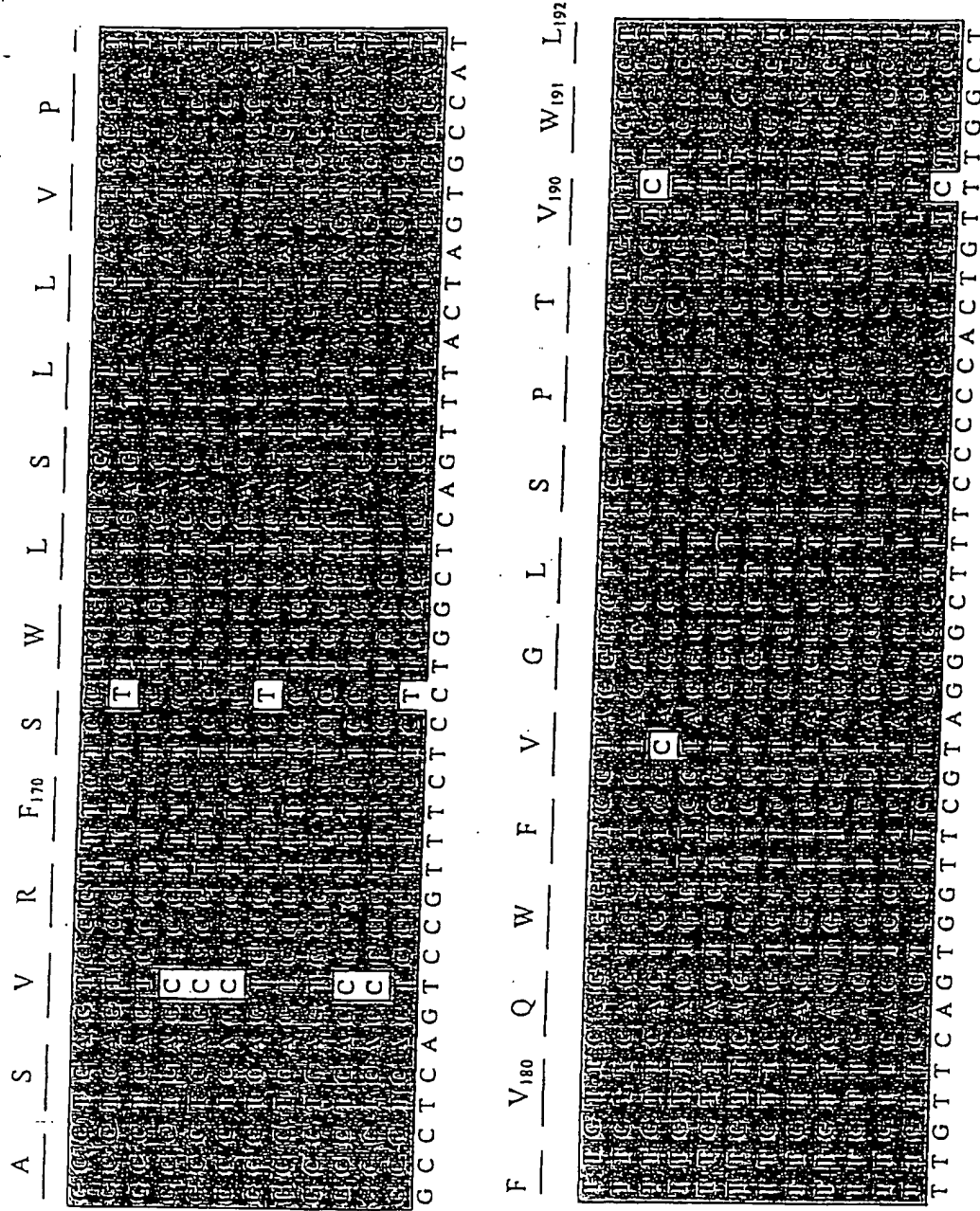
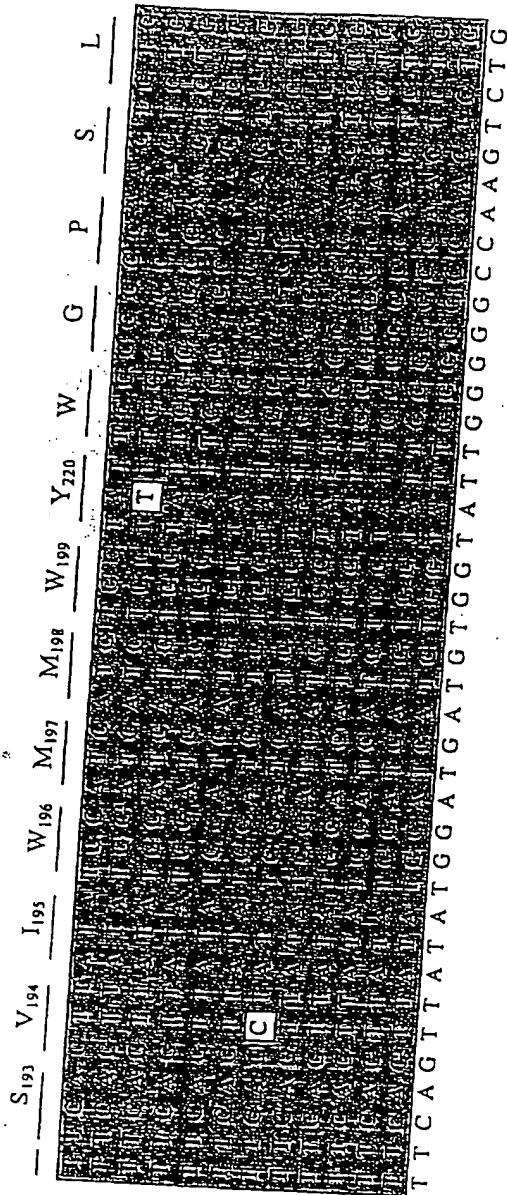


Figure 3 continued

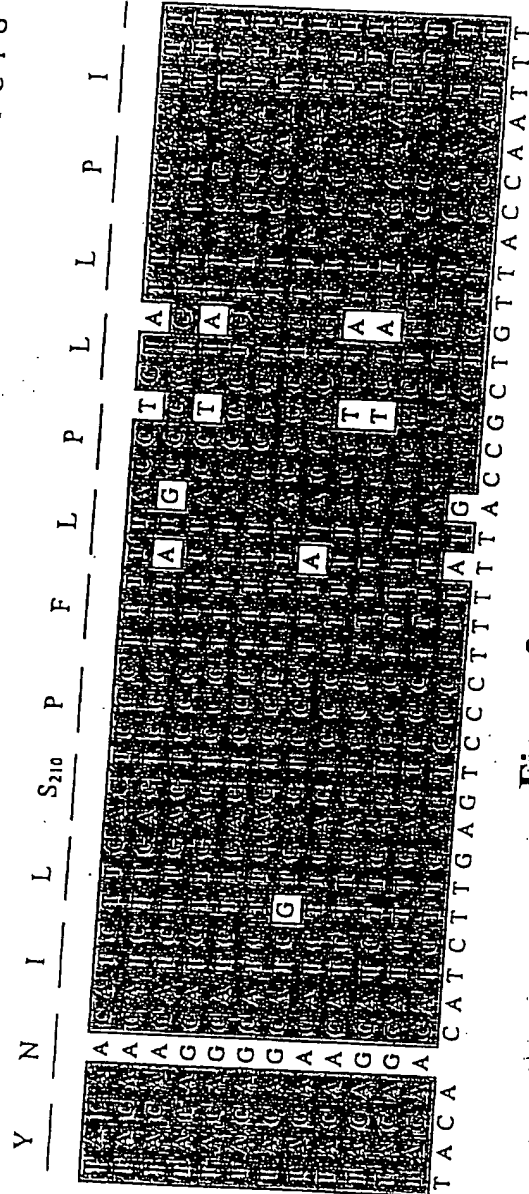
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 59418/HBVADW2
 59408/HBVADRM
 59404/HBVADR4
 329640/HPBAYW
 313780/HBVAYWMCG
 229417/HPBADW1

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 221499/HPBADW3
 221500/HPBCG
 62280/XXHEPAV
 59439/HBVAYWE
 59429/HBVAYWC
 59418/HBVADW2
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 59404/HBVADR4
 329640/HPBAYW
 313780/HBVAYWMCG
 229417/HPBADW1

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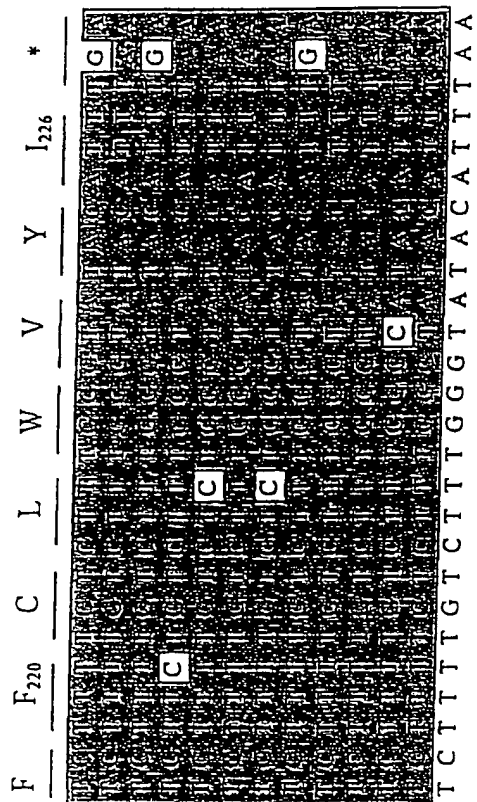


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221500/HPBCG
62280/XXHEPAV
59439/HBVAYWE
59429/HBVAYWC
59418/HBVADW2
59408/HBVADRM
59404/HBVADR4
329640/HPBAYW
313780/HBVAYWMCG
229417/HPBADW1



*329616/HPBADR1CG
221499/HPBADW3
221500/HPBCG
62280/XXHEPAV
59439/HBVAYWE
59429/HBVAYWC
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329640/HPBAYW
313780/HBVAYWMCG
229417/HPBADW1

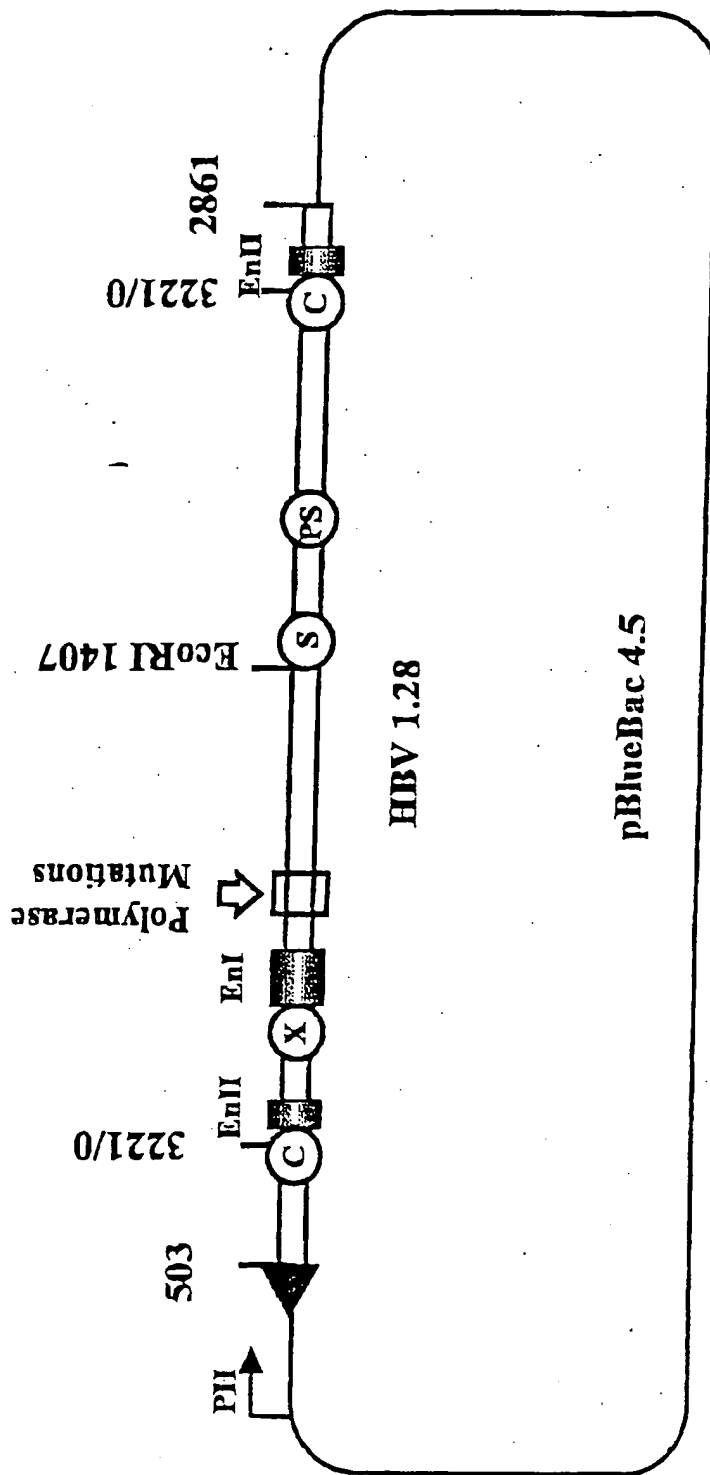
Figure 3 continued



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 221500/HPBCG
 62280/XXHEPAV
 59439/HBVAYWE
 59429/HBVAYWC
 59418/HBVADW2
 59408/HBVADRM
 59404/HBVADR4
 329640/HPBAYW
 313780/HBVAYWMC
 229417/HPBADW1

Figure 3 continued

pBBHBV1.28



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Figure 4A

pBBHBV1.5

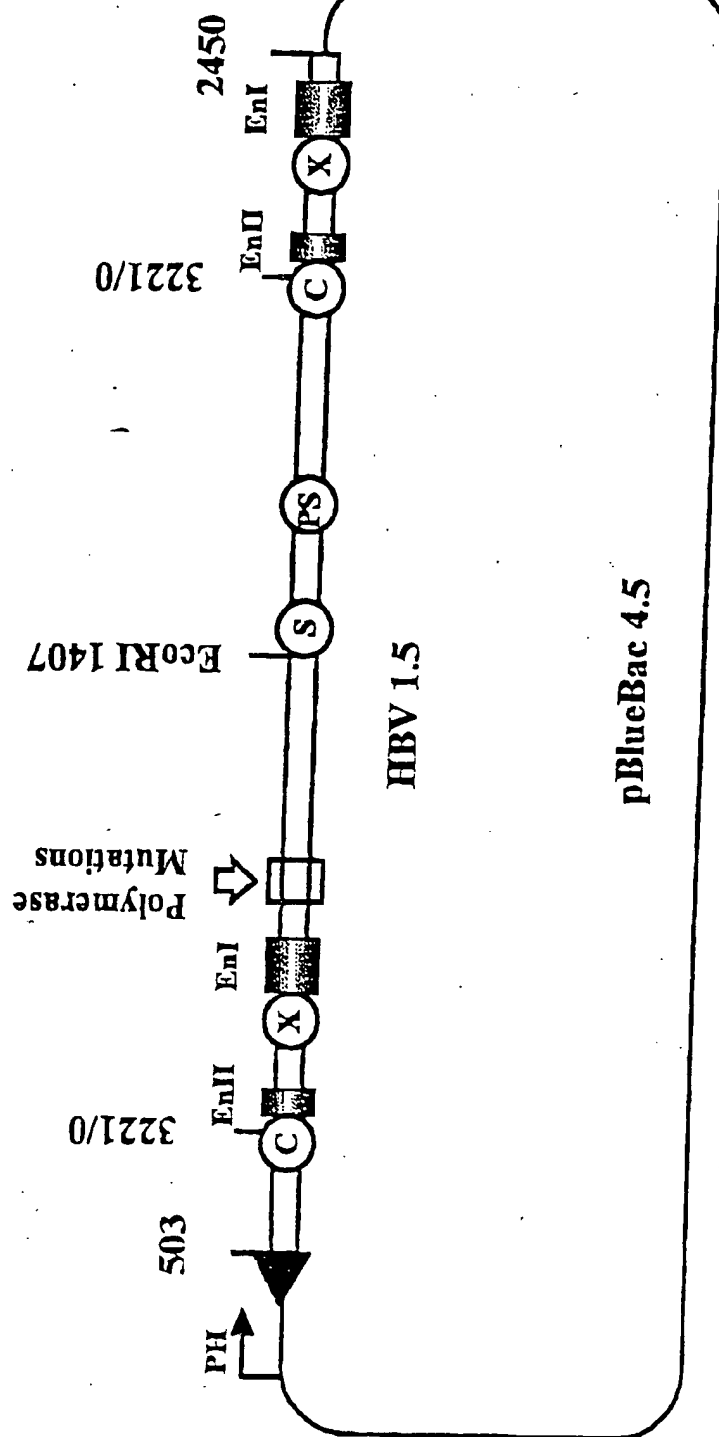


Figure 4B

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Sequence Range: 1 to 4084

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      10      20      30      40      50
GGACGACCCCTCGCGGGGCGCTTGGGACTCTCTCGTCCCCTTCTCCGTC

      60      70      80      90     100
TGCCGTTCCAGCCGACCACGGGGCGCACCTCTCTTTACGCGGTCTCCCCG

     110     120     130     140     150
TCTGTGCCTTCTCATCTGCCGGTCCGTGTGCACTTCGCTTCACCTCTGCA

     160     170     180     190     200
CGTTGCATGGAGACCACCGTGAACGCCCATCAGATCCTGCCCAAGGTCTT

     210     220     230     240     250
ACATAAGAGGACTCTTGGACTCCCAGCAATGTCAACGACCGACCTTGAGG

     260     270     280     290     300
CCTACTTCAAAGACTGTGTGTTTAAGGACTGGGAGGAGCTGGGGGAGGAG

     310     320     330     340     350
ATTAGGTAAAGGTCTTTGTATTAGGAGGCTGTAGGCATAAATTGGTCTG

     360     370     380     390     400
CGCACCAGCACCATGCAACTTTTTACCTCTGCCTAATCATCTCTTGTAC

     410     420     430     440     450
ATGTCCCACTGTTCAAGCCTCCAAGCTGTGCCTTGGGTGGCTTTGGGGCA

     460     470     480     490     500
TGGACATTGACCCTTATAAAGAATTTGGAGCTACTGTGGAGTTACTCTCG

     510     520     530     540     550
TTTTTGCCTTCTGACTTCTTTCCTTCCGTCAGAGATCTCCTAGACACCGC

     560     570     580     590     600
CTCAGCTCTGTATCGAGAAGCCTTAGAGTCTCCTGAGCATTGCTCACCTC

     610     620     630     640     650
ACCATACTGCACTCAGGCAAGCCATTCTCTGCTGGGGGGAATTGATGACT

     660     670     680     690     700
CTAGCTACCTGGGTGGGTAATAATTTGGAAGATCCAGCATCCAGGGATCT

```

Figure 5A

710 720 730 740 750
AGTAGTCAATTATGTTAATACTAACATGGGTTTAAAGATCAGGCAACTAT

760 770 780 790 800
TGTGGTTTCATATATCTTGCCTTACTTTTGAAGAGAGACTGTACTTGAA

810 820 830 840 850
TATTTGGTCTCTTTCGGAGTGTGGATTTCGCACTCCTCCAGCCTATAGACC

860 870 880 890 900
ACCAAATGCCCCCTATCTTATCAACACTTCCGGAACTACTGTTGTTAGAC

910 920 930 940 950
GACGGGACCGAGGCAGGTCCCCTAGAAGAAGAACTCCCTCGCCTCGCAGA

960 970 980 990 1000
CGCAGATCTCAATCGCCGCGTCGCAGAAGATCTCAATCTCGGGAATCTCA

1010 1020 1030 1040 1050
ATGTTAGTATTCCTTGGACTCATAAGGTGGGAACTTTACGGGGCTTTAT

1060 1070 1080 1090 1100
TCCTCTACAGTACCTATCTTTAATCCTGAATGGCAAACCTCCTTCCTTTCC

1110 1120 1130 1140 1150
TAAGATTCATTTACAAGAGGACATTATTAATAGGTGTCAACAATTTGTGG

1160 1170 1180 1190 1200
GCCCTCTCACTGTAAATGAAAAGAGAAGATTGAAATTAATTATGCCTGCT

1210 1220 1230 1240 1250
AGATTCTATCCTACCCACACTAAATATTTGCCCTTAGACAAAGGAATTAA

1260 1270 1280 1290 1300
ACCTTATTATCCAGATCAGGTAGTTAATCATTACTTCCAAACCAGACATT

1310 1320 1330 1340 1350
ATTTACATACTCTTTGGAAGGCTGGTATTCTATATAAGAGGGAAACCACA

1360 1370 1380 1390 1400
CGTAGCGCATCATTTTGCGGGTACCATATTCTTGGAACAAGAGCTACA

1410 1420 1430 1440 1450
GCATGGGAGGTTGGTCATCAAAACCTCGCAAAGGCATGGGGACGAATCTT

Figure 5A continued

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1460 1470 1480 1490 1500
TCTGTTCCCAACCCCTCTGGGATTCTTTCCCGATCATCAGTTGGACCCTGC

1510 1520 1530 1540 1550
ATTGGAGCCAACTCAAACAATCCAGATTGGGACTTCAACCCCATCAAGG

1560 1570 1580 1590 1600
ACCACTGGCCAGCAGCCAACCAGGTAGGAGTGGGAGCATTTCGGGCCAGGG

1610 1620 1630 1640 1650
CTCACCCCTCCACACGGCGGTATTTGGGGTGGAGCCCTCAGGCTCAGGG

1660 1670 1680 1690 1700
CATATTGACCACAGTGTCAACAATTCTCCTCCTGCCTCCACCAATCGGC

1710 1720 1730 1740 1750
AGTCAGGAAGGCAGCCTACTCCCATCTCTCCACCTCTAAGAGACAGTCAT

1760 1770 1780 1790 1800
CCTCAGGCCATGCAGTGGGAATTCCACTGCCTTCCACCAAGCTCTGCAGGA

1810 1820 1830 1840 1850
TCCCAGAGTCAGGGGTCTGTATCTTCCTGCTGGTGGCTCCAGTTCAGGAA

1860 1870 1880 1890 1900
CAGTAAACCCCTGCTCCGAATATTGCCTCTCACATCTCGTCAATCTCCGCG

1910 1920 1930 1940 1950
AGGACTGGGGACCCTGTGACGAACATGGAGAACATCACATCAGGATTCTCT

1960 1970 1980 1990 2000
AGGACCCCTGCTCGTGTTACAGGCGGGGTTTTCTTGTTGACAAGAATCC

2010 2020 2030 2040 2050
TCACAATACCGCAGAGTCTAGACTCGTGGTGGACTTCTCTCAATTTTCTA

2060 2070 2080 2090 2100
GGGGGATCTCCCGTGTGTCTTGGCCAAAATTTCGCAGTCCCCAACCTCCAA

2110 2120 2130 2140 2150
TCACTCACCAACCTCCTGTCCTCCAATTTGTCCTGGTTATCGCTGGATGT

2160 2170 2180 2190 2200
GTCTGCGGCGTTTTATCATATTCTCTTCATCCTGCTGCTATGCCTCATC

Figure 5A continued

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2210 2220 2230 2240 2250
TTCTTATTGGTTCTTCTGGATTATCAAGGTATGTTGCCCGTTTGTCTCT

2260 2270 2280 2290 2300
AATTCCAGGATCAACAACAACCAGTACGGGACCATGCAAAACCTGCACGA

2310 2320 2330 2340 2350
CTCCTGCTCAAGGCAACTCTATGTTTCCCTCATGTTGCTGTACAAAACCT

2360 2370 2380 2390 2400
ACGGATGGAAATTGCACCTGTATTCCCATCCCATCGTCCTGGGCTTTTCGC

2410 2420 2430 2440 2450
AAAATACCTATGGGAGTGGGCCTCAGTCCGTTTCTCTTGGCTCAGTTTAC

2460 2470 2480 2490 2500
TAGTGCCATTTGTTTCAGTGGTTCGTAGGGCTTTCCCCCACTGTTTGGCTT

2510 2520 2530 2540 2550
TCAGCTATATGGATGATGTGGTATTGGGGGCCAAGTCTGTACAGCATCGT

2560 2570 2580 2590 2600
GAGTCCCTTTATACCGCTGTTACCAATTTCTTTTGTCTCTGGGTATACA

2610 2620 2630 2640 2650
TTTAAACCCTAACAACAACAAAAGATGGGGTTATTCCCTAAACTTCATGG

2660 2670 2680 2690 2700
GCTACATAATTGGAAGTTGGGGAACCTTTGCCACAGGATCATATTGTACAA

2710 2720 2730 2740 2750
AAGATCAAACACTGTTTTAGAAAACCTTCCTGTTAACAGGCCTATTGATTG

2760 2770 2780 2790 2800
GAAAGTATGTCAAAGAATTGTGGGTCTTTTGGGCTTTGCTGCTCCATTTA

2810 2820 2830 2840 2850
CACAAATGTGGATATCCTGCCTTAATGCCTTTGTATGCATGTATACAAGCT

2860 2870 2880 2890 2900
AAACAGGCTTTCACTTTCTCGCCAACTTACAAGGCCTTTCTAAGTAAACA

2910 2920 2930 2940 2950
GTACATGAACCTTTACCCCGTTGCTCGGCAACGGCCTGGTCTGTGCCAAG

Figure 5A continued

16/42

2960 2970 2980 2990 3000
TGTTTGCTGACGCAACCCCCACTGGCTGGGGCTTGCCCATAGGCCATCAG

3010 3020 3030 3040 3050
CGCATGCGTGGAACCTTTGTGGCTCCTCTGCCGATCCATACTGCGGAACT

3060 3070 3080 3090 3100
CCTAGCCGCTTGTTTTGCTCGCAGCCGGTCTGGAGCAAAGCTCATCGGAA

3110 3120 3130 3140 3150
CTGACAATTCTGTCGTCTCTCGCGGAAATATACATCGTTTCCATGGCTG

3160 3170 3180 3190 3200
CTAGGCTGTACTGCCAACTGGATCCTTCGCGGGACGTCCTTTGTTTACGT

3210 3220 3230 3240 3250
CCCGTCGGCGCTGAATCCCGCGGACGACCCCTCGCGGGGCGCTTGGGAC

3260 3270 3280 3290 3300
TCTCTCGTCCCCCTTCTCCGTCTGCCGTTCAGCCGACCACGGGGCGCACC

3310 3320 3330 3340 3350
TCTCTTTACGCGGTCTCCCCGTCTGTGCCTTCTCATCTGCCGGTCCGTGT

3360 3370 3380 3390 3400
GCACTTCGCTTCACCTCTGCACGTTGCATGGAGACCACCGTGAACGCCCA

3410 3420 3430 3440 3450
TCAGATCCTGCCCAAGGTCTTACATAAGAGGACTCTTGGACTCCCAGCAA

3460 3470 3480 3490 3500
TGTCACGACCGACCTTGAGGCCTACTTCAAAGACTGTGTGTTAAGGAC

3510 3520 3530 3540 3550
TGGGAGGAGCTGGGGGAGGAGATTAGGTTAAAGGTCTTTGTATTAGGAGG

3560 3570 3580 3590 3600
CTGTAGGCATAAATTGGTCTGCGCACCAGCACCATGCAACTTTTTACCT

3610 3620 3630 3640 3650
CTGCCTAATCATCTCTTGTACATGTCCCACTGTTCAAGCCTCCAAGCTGT

3660 3670 3680 3690 3700
GCCTTGGGTGGCTTTGGGGCATGGACATTGACCCTTATAAAGAATTTGGA

Figure 5A continued

17/42

3710 3720 3730 3740 3750
GCTACTGTGGAGTTACTCTCGTTTTTGCCTTCTGACTTCTTTCCTTCCGT

3760 3770 3780 3790 3800
CAGAGATCTCCTAGACACCGCCTCAGCTCTGTATCGAGAAGCCTTAGAGT

3810 3820 3830 3840 3850
CTCCTGAGCATTGCTCACCTCACCATACTGCACTCAGGCAAGCCATTCTC

3860 3870 3880 3890 3900
TGCTGGGGGGAATTGATGACTCTAGCTACCTGGGTGGGTAATAATTTGGA

3910 3920 3930 3940 3950
AGATCCAGCATCCAGGGATCTAGTAGTCAATTATGTTAATACTAACATGG

3960 3970 3980 3990 4000
GTTTAAAGATCAGGCAACTATTGTGGTTTCATATATCTTGCCTTACTTTT

4010 4020 4030 4040 4050
GGAAGAGAGACTGTACTTGAATATTTGGTCTCTTTCGGAGTGTGGATTCTG

4060 4070 4080
CACTCCTCCAGCCTATAGACCACCAAATGCCCT

Figure 5A continued

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Sequence Range: 1 to 4496

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      10      20      30      40      50
GATATCCTGCCTTAATGCCTTTGTATGCATGTATACAAGCTAAACAGGCT

      60      70      80      90     100
TTCAC TTTCTCGCCAACTTACAAGGCCTTTCTAAGTAAACAGTACATGAA

     110     120     130     140     150
CCTTTACCCCGTTGCTCGGCAACGGCCTGGTCTGTGCCAAGTGTGCTG

     160     170     180     190     200
ACGCAACCCCACTGGCTGGGGCTTGGCCATAGGCCATCAGCGCATGCGT

     210     220     230     240     250
GGAACCTTTGTGGCTCCTCTGCCGATCCATACTGCGGAACTCCTAGCCGC

     260     270     280     290     300
TTGTTTGTCTCGCAGCCGGTCTGGAGCAAAGCTCATCGGAACTGACAATT

     310     320     330     340     350
CTGTCGTCCTCTCGCGGAAATATACATCGTTTCCATGGCTGCTAGGCTGT

     360     370     380     390     400
ACTGCCAACTGGATCCTTCGCGGGACGTCCTTTGTTTACGTCCCGTCGGC

     410     420     430     440     450
GCTGAATCCCGCGGACGACCCCTCGCGGGCCGCTTGGGACTCTCTCGTC

     460     470     480     490     500
CCCTTCTCCGTCTGCCGTTCCAGCCGACCACGGGGCGCACCTCTCTTTAC

     510     520     530     540     550
GCGGTCTCCCGTCTGTGCCTTCTCATCTGCCGGTCCGTGTGCACTTCGC

     560     570     580     590     600
TTCACCTCTGCACGTTGCATGGAGACCACCGTGAACGCCCATCAGATCCT

     610     620     630     640     650
GCCCAAGGTCTTACATAAGAGGACTCTTGGACTCCCAGCAATGTCAACGA

     660     670     680     690     700
CCGACCTTGAGGCCTACTTCAAAGACTGTGTGTTTAAGGACTGGGAGGAG
```

Figure 5B

19/42

710 720 730 740 750
CTGGGGGAGGAGATTAGGTTAAAGGTCTTTGTATTAGGAGGCTGTAGGCA

760 770 780 790 800
TAAATTGGTCTGCGCACCAGCAGCATGCAACTTTTTACCTCTGCCTAAT

810 820 830 840 850
CATCTCTTGACATGTCCCACTGTTCAAGCCTCCAAGCTGTGCCTTGGGT

860 870 880 890 900
GGCTTTGGGGCATGGACATTGACCCTTATAAAGAATTTGGAGCTACTGTG

910 920 930 940 950
GAGTTACTCTCGTTTTTGCCTTCTGACTTCTTTCCTTCCGTCAGAGATCT

960 970 980 990 1000
CCTAGACACCGCCTCAGCTCTGTATCGAGAAGCCTTAGAGTCTCCTGAGC

1010 1020 1030 1040 1050
ATTGCTCACCTCACCATACTGCACTCAGGCAAGCCATTCTCTGCTGGGGG

1060 1070 1080 1090 1100
GAATTGATGACTCTAGCTACCTGGGTGGGTAATAATTTGGAAGATCCAGC

1110 1120 1130 1140 1150
ATCCAGGGATCTAGTAGTCAATTATGTTAATACTAACATGGGTTTAAAGA

1160 1170 1180 1190 1200
TCAGGCAACTATTGTGGTTTCATATATCTTGCCTTACTTTTGAAGAGAG

1210 1220 1230 1240 1250
ACTGTACTTGAATATTTGGTCTCTTTCGGAGTGTGGATTTCGCACTCCTCC

1260 1270 1280 1290 1300
AGCCTATAGACCACCAAATGCCCCCTATCTTATCAACACTTCCGGAACTA

1310 1320 1330 1340 1350
CTGTTGTTAGACGACGGGACCGAGGCAGGTCCCCTAGAAGAAGAACTCCC

1360 1370 1380 1390 1400
TCGCCTCGCAGACGCAGATCTCAATCGCCGCGTCGCAGAAGATCTCAATC

1410 1420 1430 1440 1450
TCGGGAATCTCAATGTTAGTATTCTTGGACTCATAAGGTGGGAACTTT

Figure 5B continued

20/42

1460 1470 1480 1490 1500
ACGGGGCTTTATTCCTCTACAGTACCTATCTTTAATCCTGAATGGCAAAC

1510 1520 1530 1540 1550
TCCTTCCTTTCTAAGATTCAATTTACAAGAGGACATTATTAATAGGTGTC

1560 1570 1580 1590 1600
AACAAATTTGTGGGCCCTCTCACTGTAAATGAAAAGAGAAGATTGAAATTA

1610 1620 1630 1640 1650
ATTATGCCTGCTAGATTCTATCCTACCCACACTAAATATTTGCCCTTAGA

1660 1670 1680 1690 1700
CAAAGGAATTAAACCTTATTATCCAGATCAGGTAGTTAATCATTACTTCC

1710 1720 1730 1740 1750
AAACCAGACATTATTTACATACTCTTTGGAAGGCTGGTATTCTATATAAG

1760 1770 1780 1790 1800
AGGGAAACCACACGTAGCGCATCATTTTGCGGGTCACCATATTCTTGGGA

1810 1820 1830 1840 1850
ACAAGAGCTACAGCATGGGAGGTTGGTCATCAAAACCTCGCAAAGGCATG

1860 1870 1880 1890 1900
GGGACGAATCTTTCTGTTCCTCAACCCTCTGGGATTCTTTCCCGATCATCA

1910 1920 1930 1940 1950
GTTGGACCCTGCATTTCGGAGCCAACTCAAACAATCCAGATTGGGACTTCA

1960 1970 1980 1990 2000
ACCCCATCAAGGACCACTGGCCAGCAGCCAACCAGGTAGGAGTGGGAGCA

2010 2020 2030 2040 2050
TTCGGGGCCAGGGCTCACCCCTCCACACGGCGGTATTTTGGGGTGGAGCCC

2060 2070 2080 2090 2100
TCAGGCTCAGGGCATATTGACCACAGTGTCAACAATTCCTCCTCCTGCCT

2110 2120 2130 2140 2150
CCACCAATCGGCAGTCAGGAAGGCAGCCTACTCCCATCTCTCCACCTCTA

2160 2170 2180 2190 2200
AGAGACAGTCATCCTCAGGCCATGCAGTGGAATTCCACTGCCTTCCACCA

Figure 5B continued

21/42

2210 2220 2230 2240 2250
AGCTCTGCAGGATCCCAGAGTCAGGGGTCTGTATCTTCCTGCTGGTGGCT

2260 2270 2280 2290 2300
CCAGTTCAGGAACAGTAAACCCTGCTCCGAATATTGCCTCTCACATCTCG

2310 2320 2330 2340 2350
TCAATCTCCGCGAGGACTGGGGACCCTGTGACGAACATGGAGAACATCAC

2360 2370 2380 2390 2400
ATCAGGATTCTAGGACCCCTGCTCGTGTTACAGGCGGGGTTTTCTTGT

2410 2420 2430 2440 2450
TGACAAGAATCCTCACAATACCGCAGAGTCTAGACTCGTGGTGGACTTCT

2460 2470 2480 2490 2500
CTCAATTTTCTAGGGGGATCTCCCGTGTGTCTTGGCCAAAATTGCGAGTC

2510 2520 2530 2540 2550
CCCAACCTCCAATCACTCACCAACCTCCTGTCTCCAATTTGTCTGGTT

2560 2570 2580 2590 2600
ATCGCTGGATGTGTCTGCGGCGTTTTATCATATTCCTCTTCATCCTGCTG

2610 2620 2630 2640 2650
CTATGCCTCATCTTCTTATTGGTTCTTCTGGATTATCAAGGTATGTTGCC

2660 2670 2680 2690 2700
CGTTTGTCTCTAATTCCAGGATCAACAACAACAGTACGGGACCATGCA

2710 2720 2730 2740 2750
AAACCTGCACGACTCCTGCTCAAGGCAACTCTATGTTTCCCTCATGTTGC

2760 2770 2780 2790 2800
TGTACAAAACCTACGGATGGAAATTGCACCTGTATCCCATCCCATCGTC

2810 2820 2830 2840 2850
CTGGGCTTTCGCAAAATACCTATGGGAGTGGGCCTCAGTCCGTTTCTCTT

2860 2870 2880 2890 2900
GGCTCAGTTTACTAGTGCCATTTGTTCAAGTGGTTCGTAGGGCTTTCCCCC

2910 2920 2930 2940 2950
ACTGTTTGGCTTTCAGCTATATGGATGATGTGGTATTGGGGGCCAAGTCT

Figure 5B continued

2960 2970 2980 2990 3000
GTACAGCATCGTGAGTCCCTTTATACCGCTGTTACCAATTTTCTTTTGTC

3010 3020 3030 3040 3050
TCTGGGTATACATTTAAACCCTAACAAAACAAAAAGATGGGGTTATTCCC

3060 3070 3080 3090 3100
TAAACTTCATGGGCTACATAATTGGAAGTTGGGGAACCTTGCCACAGGAT

3110 3120 3130 3140 3150
CATATTGTACAAAAGATCAAACTGTTTTAGAAAACCTCCTGTTAACAG

3160 3170 3180 3190 3200
GCCTATTGATTGGAAAGTATGTCAAAGAATTGTGGGTCTTTTGGGCTTTG

3210 3220 3230 3240 3250
CTGCTCCATTTACACAATGTGGATATCCTGCCTTAATGCCTTTGTATGCA

3260 3270 3280 3290 3300
TGTATACAAGCTAAACAGGCTTTCACTTTCTCGCCAACCTTACAAGGCCTT

3310 3320 3330 3340 3350
TCTAAGTAAACAGTACATGAACCTTTACCCCGTTGCTCGGCAACGGCCTG

3360 3370 3380 3390 3400
GTCTGTGCCAAGTGTGCTGACGCAACCCCACTGGCTGGGGCTTGGCC

3410 3420 3430 3440 3450
ATAGGCCATCAGCGCATGCGTGGAACCTTTGTGGCTCCTCTGCCGATCCA

3460 3470 3480 3490 3500
TACTGCGGAACTCCTAGCCGCTTGTTTTGCTCGCAGCCGGTCTGGAGCAA

3510 3520 3530 3540 3550
AGCTCATCGGAACTGACAATTCTGTCGTCCTCTCGCGGAAATATACATCG

3560 3570 3580 3590 3600
TTTCCATGGCTGCTAGGCTGTACTGCCAACTGGATCCTTCGCGGGACGTC

3610 3620 3630 3640 3650
CTTTGTTTACGTCCCGTCGGCGCTGAATCCCGCGGACGCCCTCGCGGG

3660 3670 3680 3690 3700
GCCGCTTGGGACTCTCTCGTCCCCTTCTCCGTCTGCCGTTCCAGCCGACC

Figure 5B continued

3710 3720 3730 3740 3750
ACGGGGCGCACCTCTCTTTACGCGGTCTCCCCGTCTGTGCCTTCTCATCT

3760 3770 3780 3790 3800
GCCGGTCCGTGTGCACTTCGCTTCACCTCTGCACGTTGCATGGAGACCAC

3810 3820 3830 3840 3850
CGTGAACGCCCCATCAGATCCTGCCCAAGGTCTTACATAAGAGGACTCTTG

3860 3870 3880 3890 3900
GACTCCCAGCAATGTCAACGACCGACCTTGAGGCCTACTTCAAAGACTGT

3910 3920 3930 3940 3950
GTGTTTAAGGACTGGGAGGAGCTGGGGGAGGAGATTAGGTTAAAGGTCTT

3960 3970 3980 3990 4000
TGTATTAGGAGGCTGTAGGCATAAATTGGTCTGCGCACCAGCACCATGCA

4010 4020 4030 4040 4050
ACTTTTTCACCTCTGCCTAATCATCTCTTGTACATGTCCCACTGTTCAAG

4060 4070 4080 4090 4100
CCTCCAAGCTGTGCCTTGGGTGGCTTTGGGGCATGGACATTGACCCTTAT

4110 4120 4130 4140 4150
AAAGAATTTGGAGCTACTGTGGAGTTACTCTCGTTTTTGCCTTCTGACTT

4160 4170 4180 4190 4200
CTTTCCTTCCGTCAGAGATCTCCTAGACACCGCCTCAGCTCTGTATCGAG

4210 4220 4230 4240 4250
AAGCCTTAGAGTCTCCTGAGCATTGCTCACCTCACCATACTGCACTCAGG

4260 4270 4280 4290 4300
CAAGCCATTCTCTGCTGGGGGGAATTGATGACTCTAGCTACCTGGGTGGG

4310 4320 4330 4340 4350
TAATAATTTGGAAGATCCAGCATCCAGGGATCTAGTAGTCAATTATGTTA

4360 4370 4380 4390 4400
ATACTAACATGGGTTTAAAGATCAGGCAACTATTGTGGTTTCATATATCT

4410 4420 4430 4440 4450
TGCCTTACTTTTGGGAAGAGAGACTGTACTTGAATATTTGGTCTCTTTCGG

4460 4470 4480 4490
AGTGTGGATTTCGACTCCTCCAGCCTATAGACCACCAAATGCCCT

Figure 5B continued

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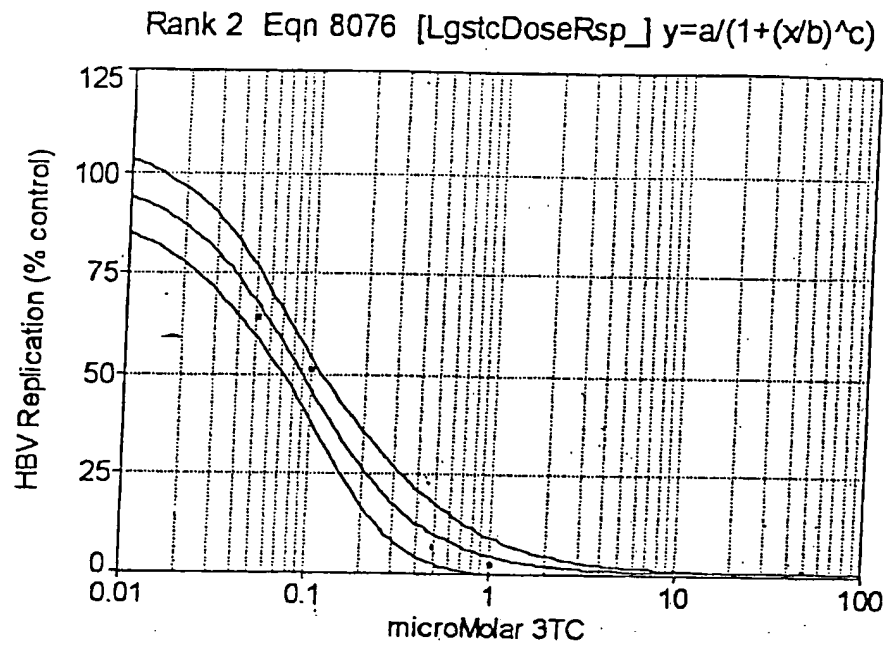


Figure 6A

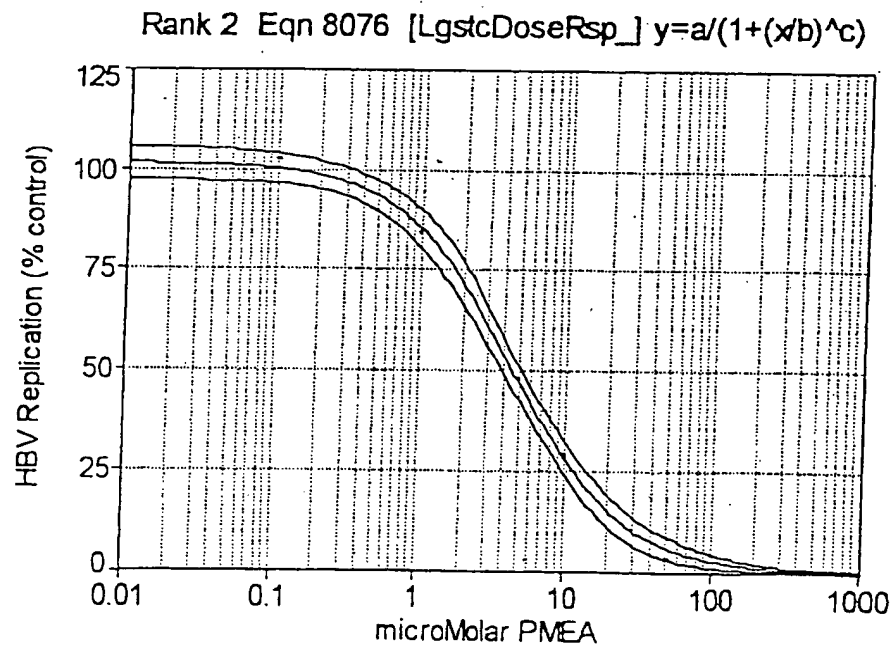


Figure 6B

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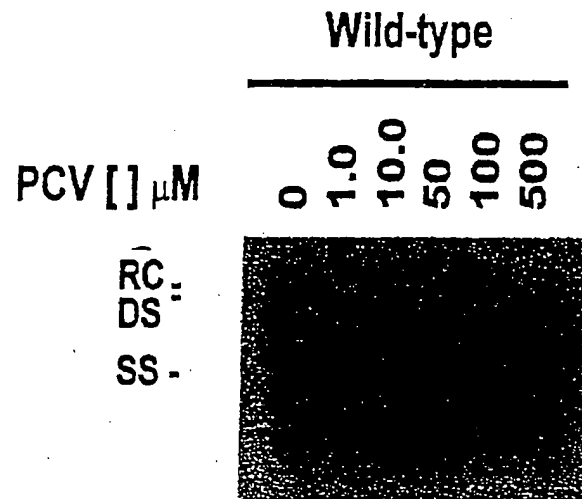


Figure 6C

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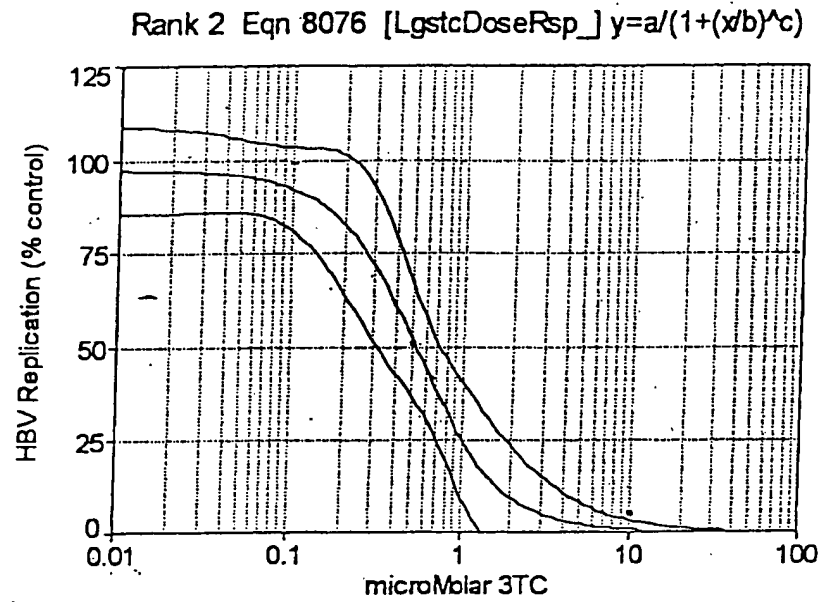


Figure 7A

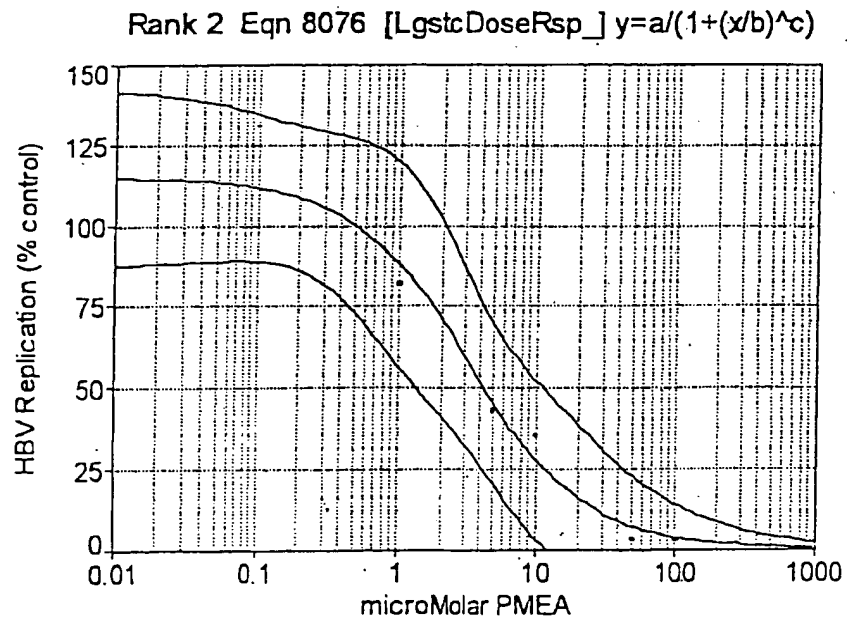


Figure 7B

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Rank 45 Eqn 19 $y=a+b\ln x/x^2$

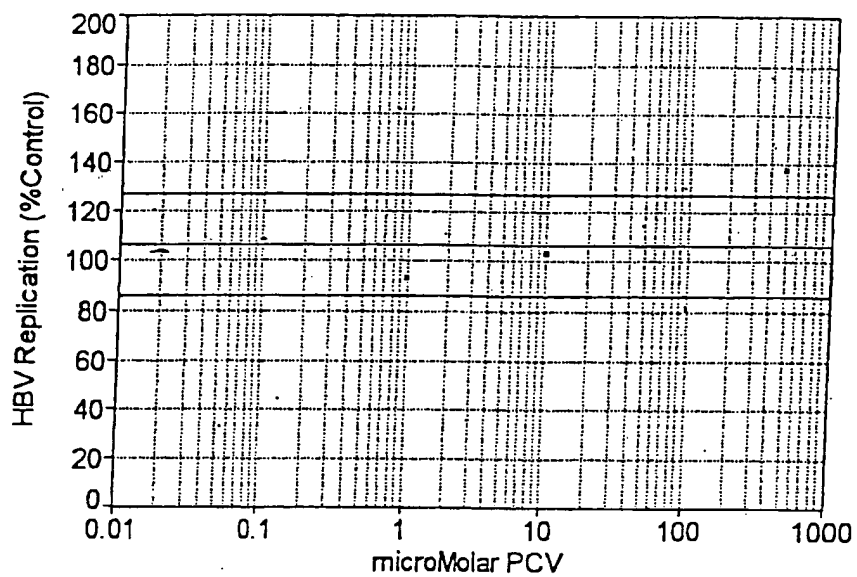


Figure 7C

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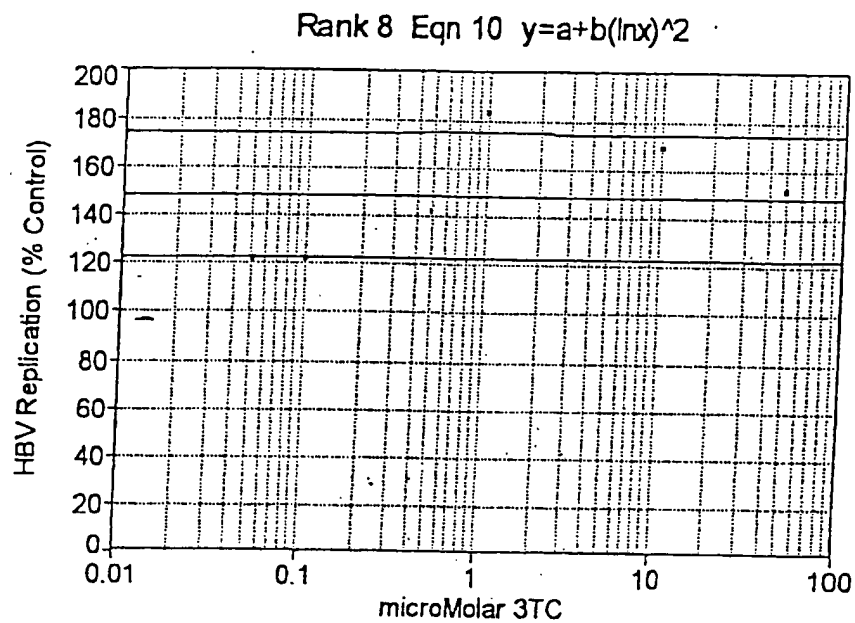


Figure 8A

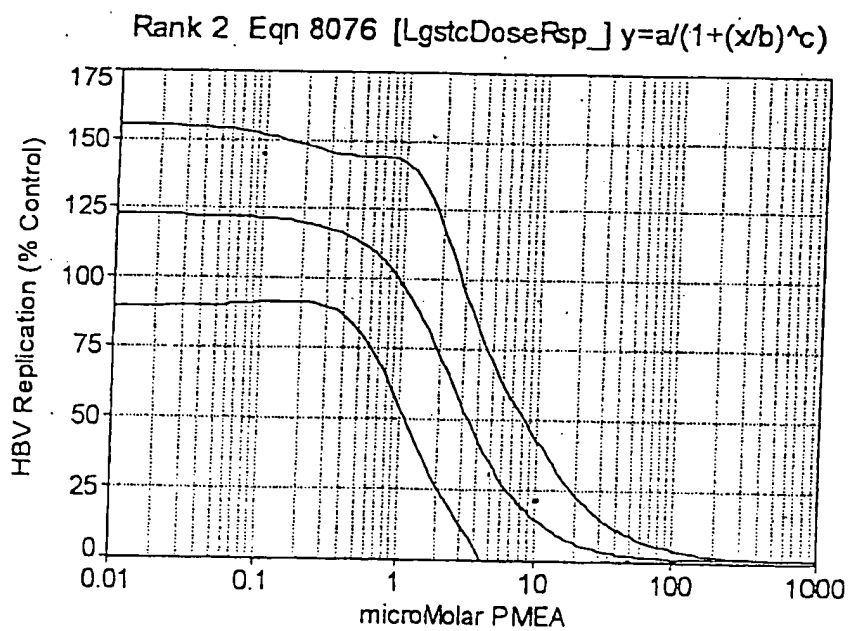
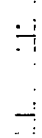


Figure 8B



1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Figure 9B

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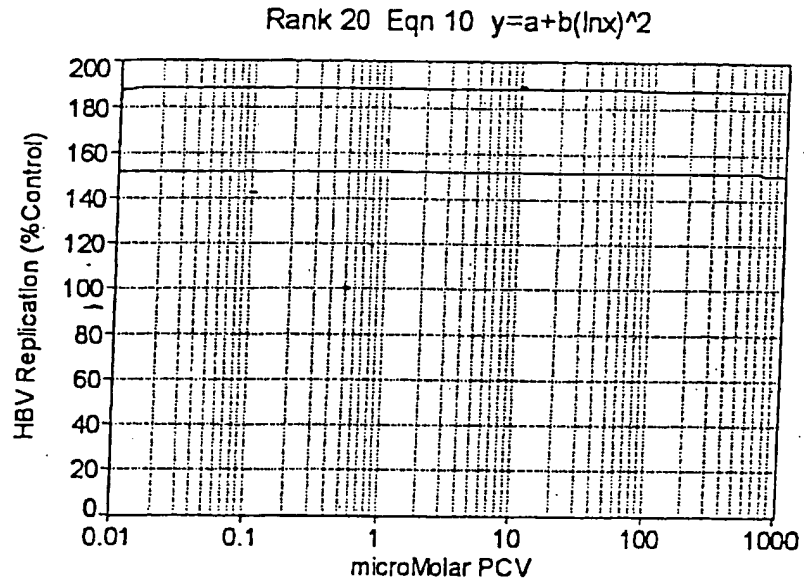


Figure 9C

Cold dCTP Competition

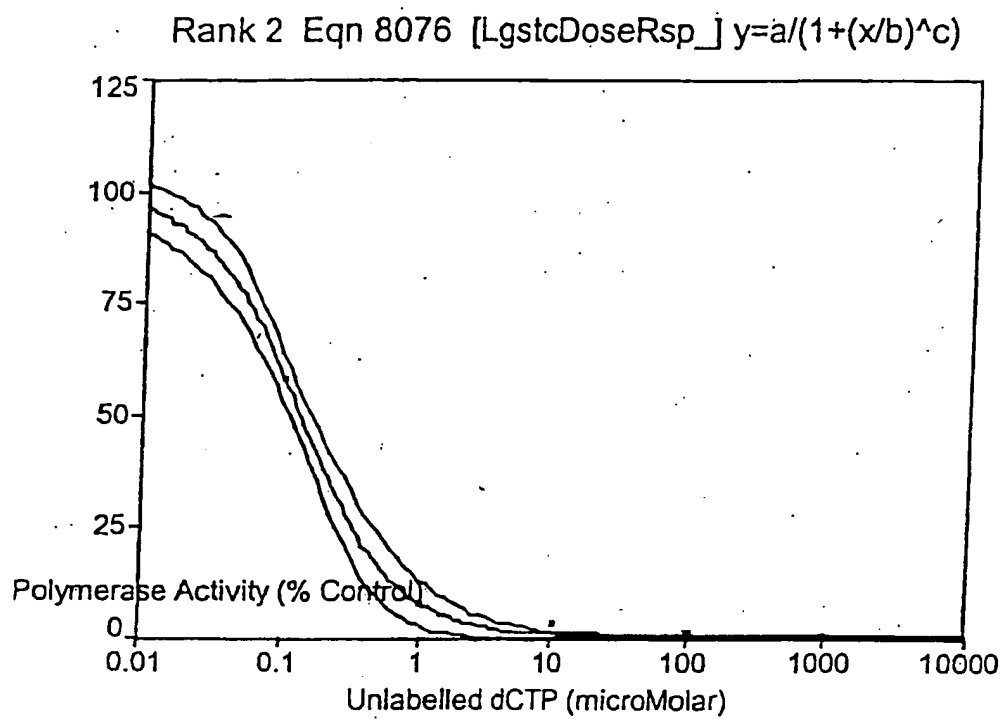


Figure 10

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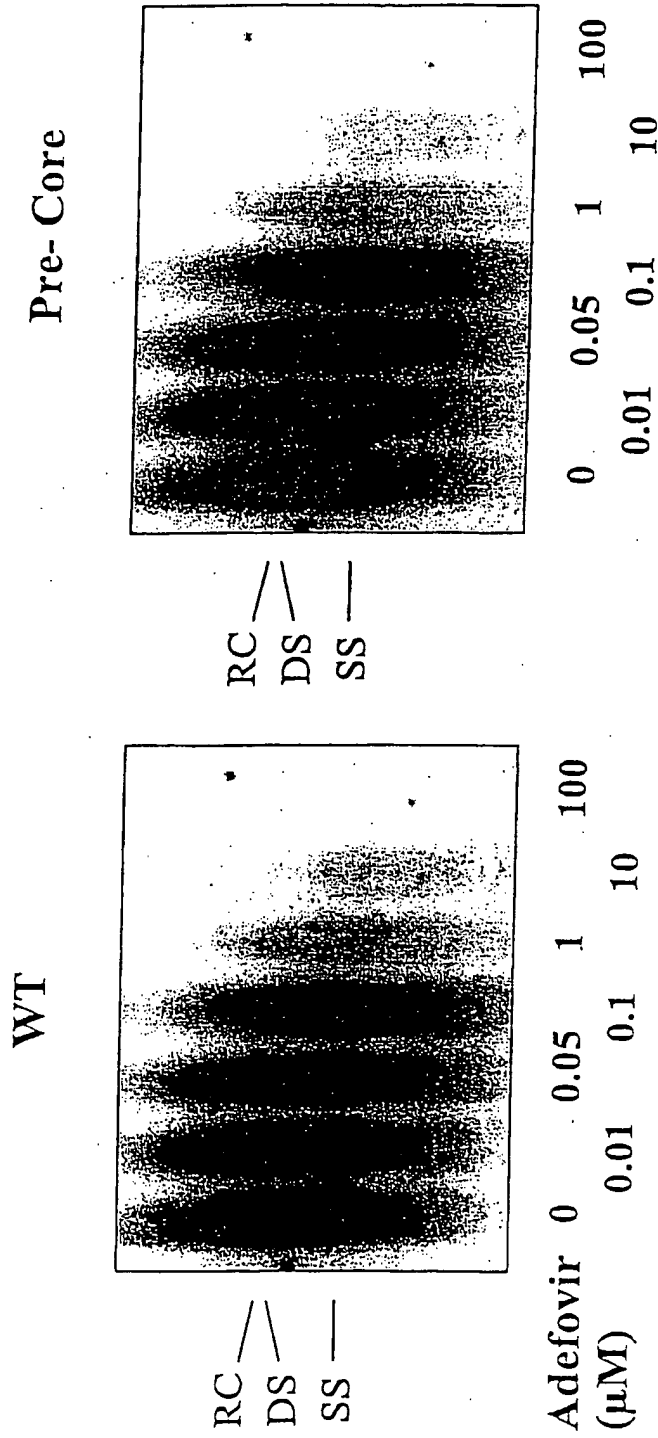


Figure 11A

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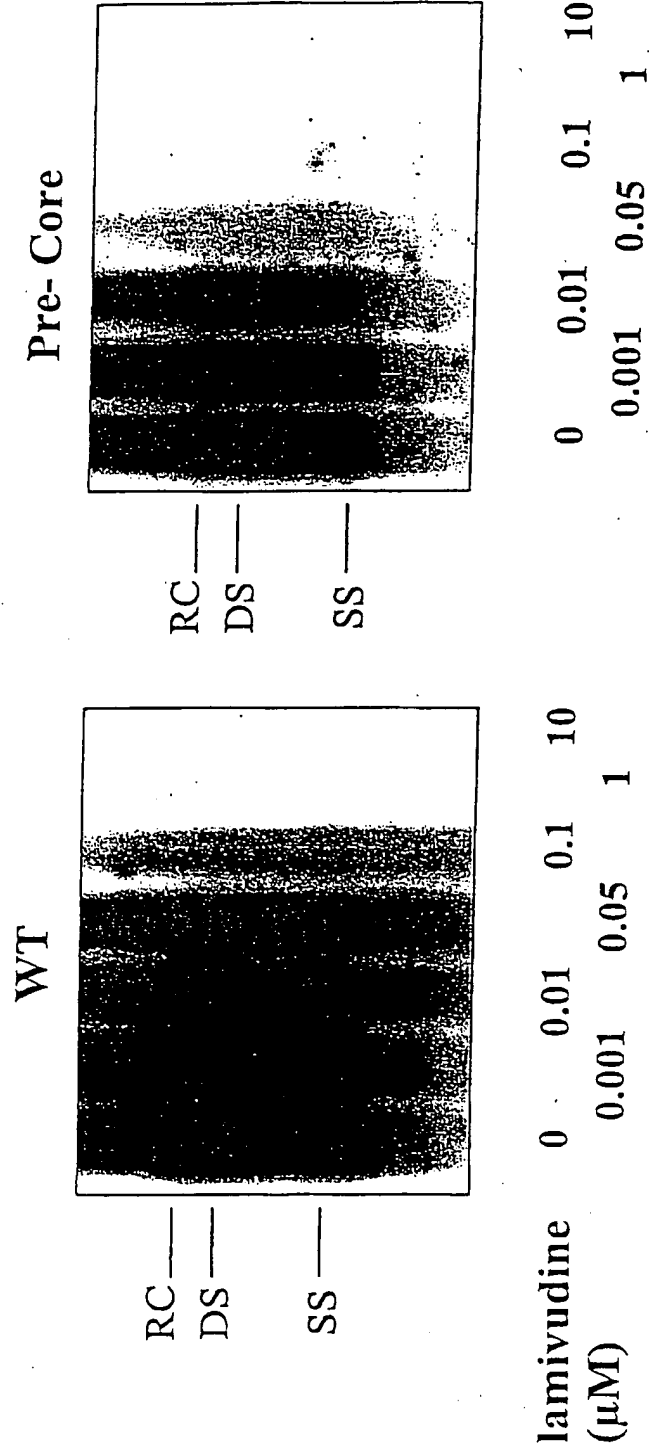


Figure 11B

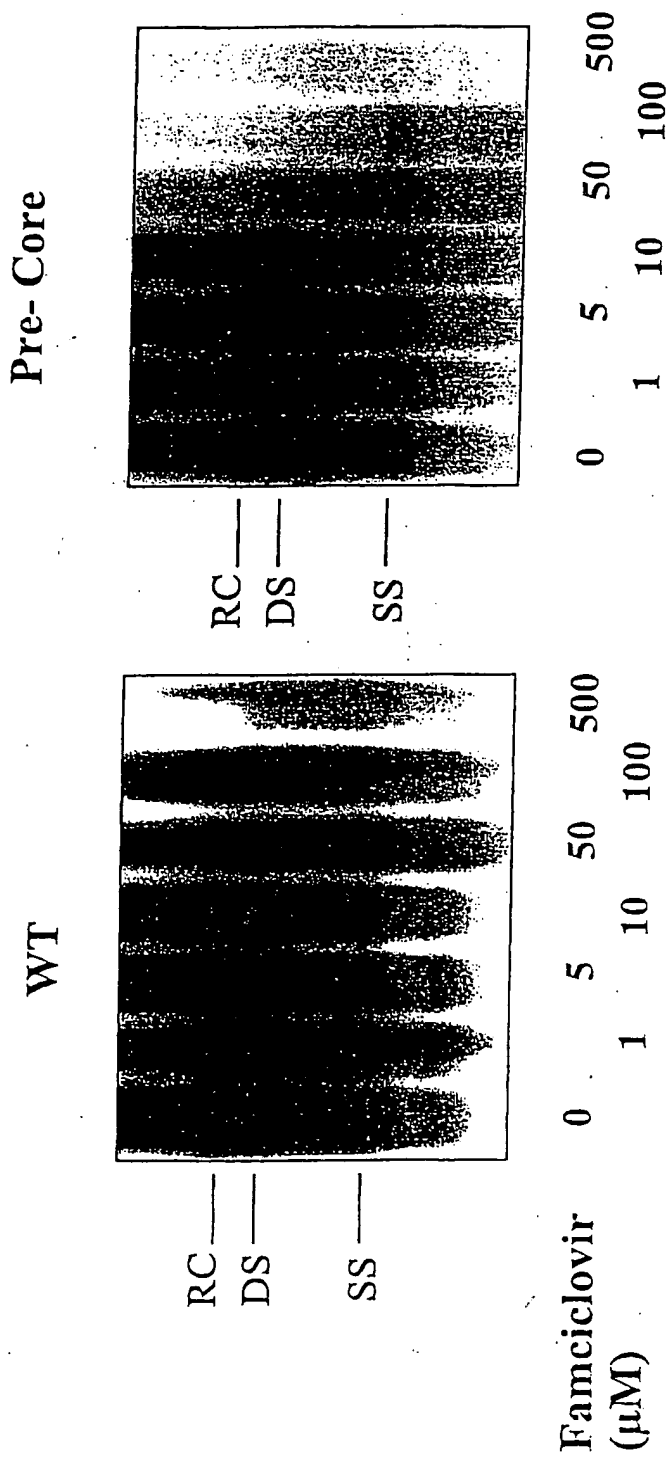


Figure 11C

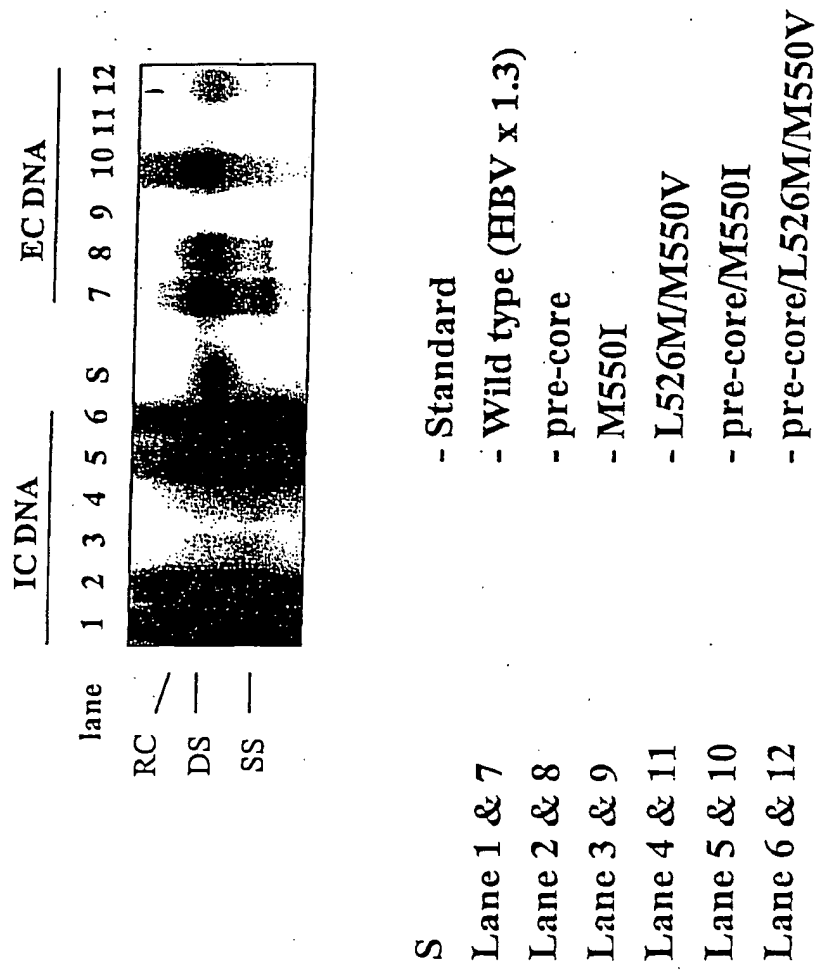


Figure 12

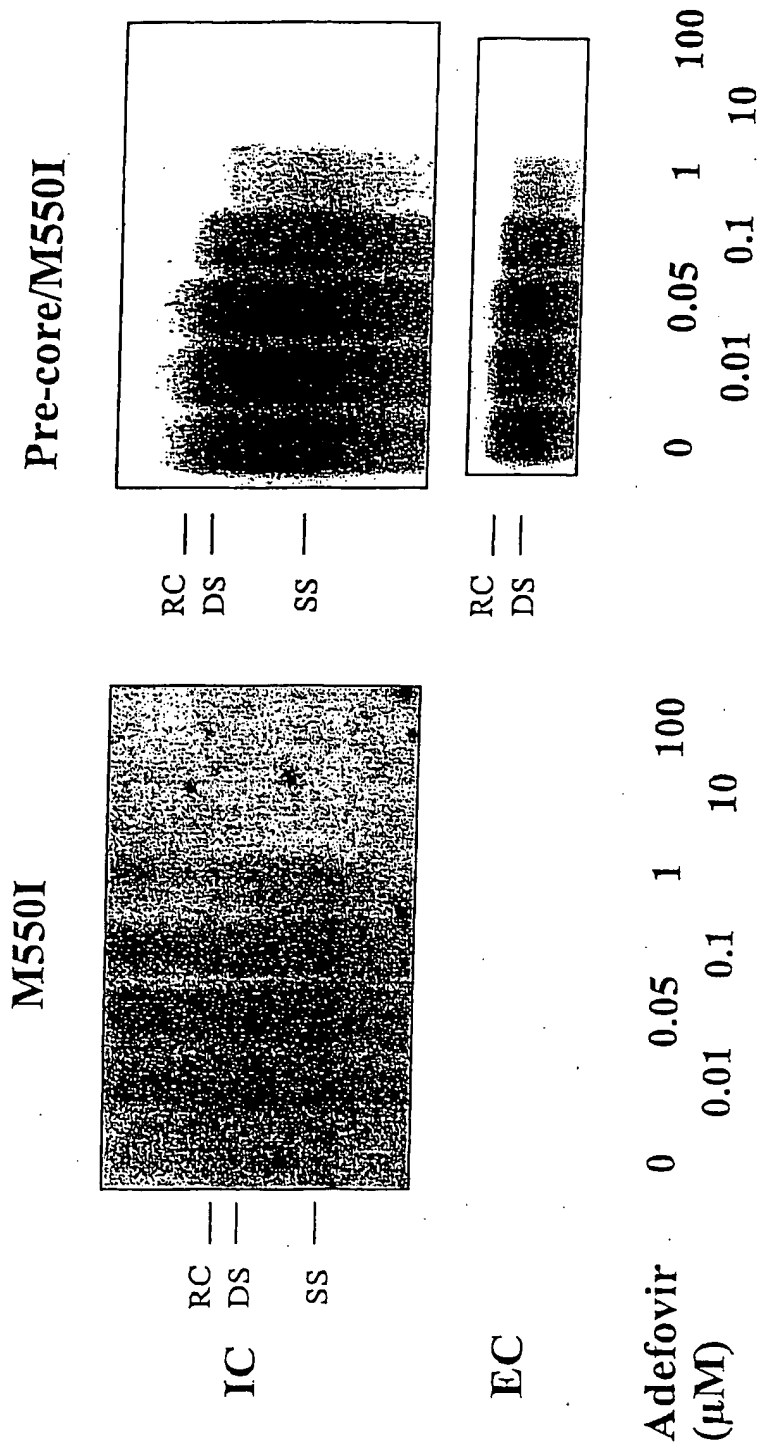
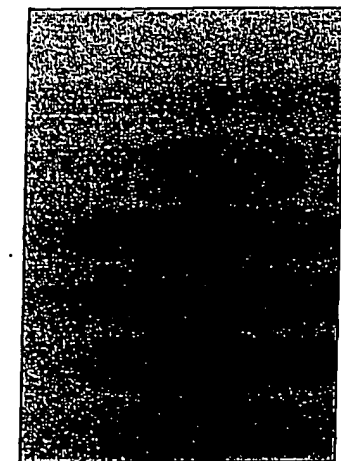


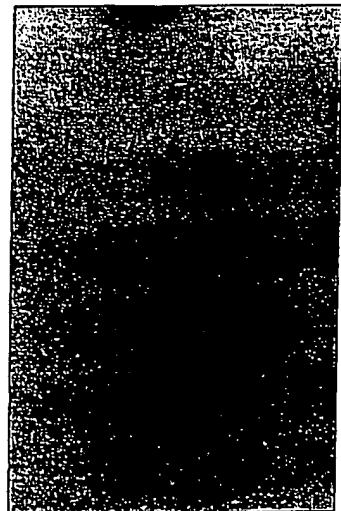
Figure 13A

pre-core/L526M/M550V



RC —
DS —
SS —

L526M/M550V



RC —
DS —
SS —
IC



RC —
DS —

EC

Adefovir (μM) 0 0.05 1 100 0 0.05 1 100
0.01 0.1 10 0.01 0.1 10

Figure 13B

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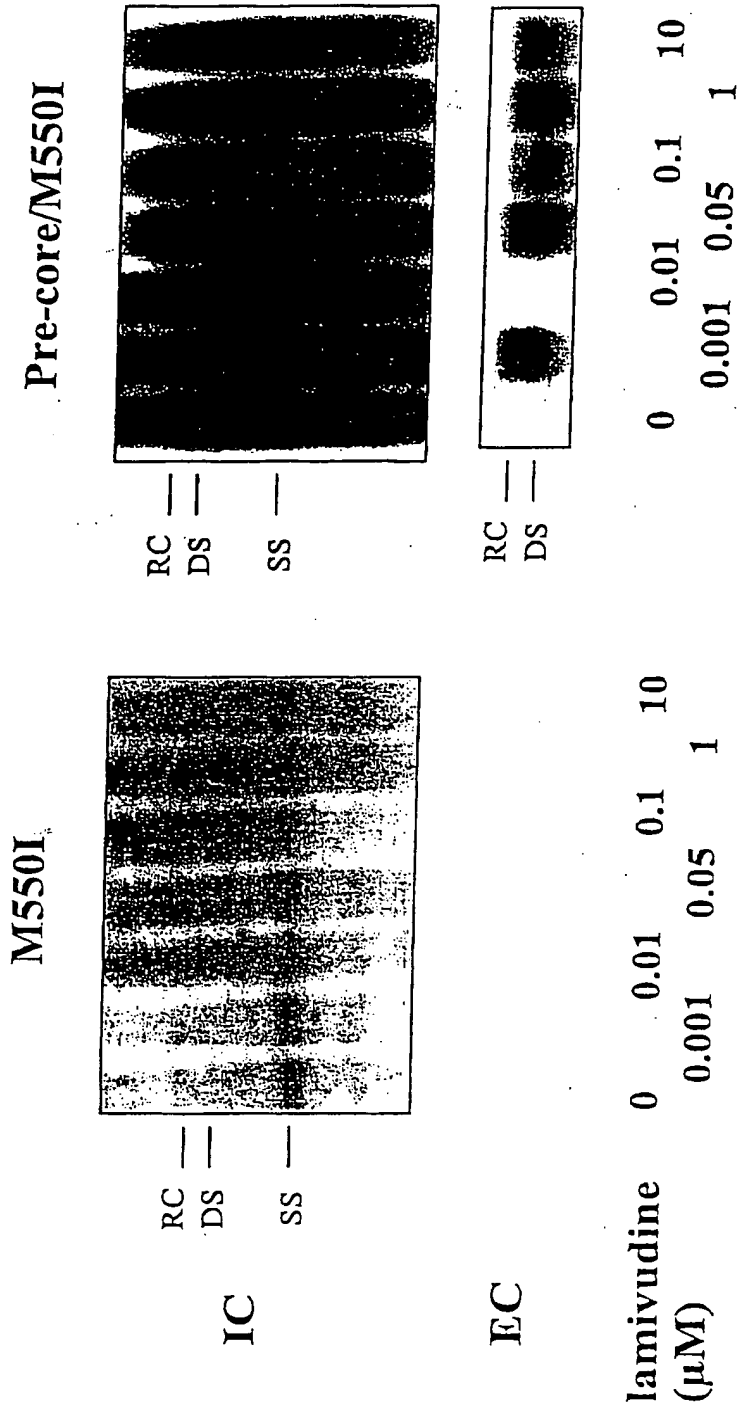


Figure 13C

L526M/M550V Pre-core/L526M/M550V

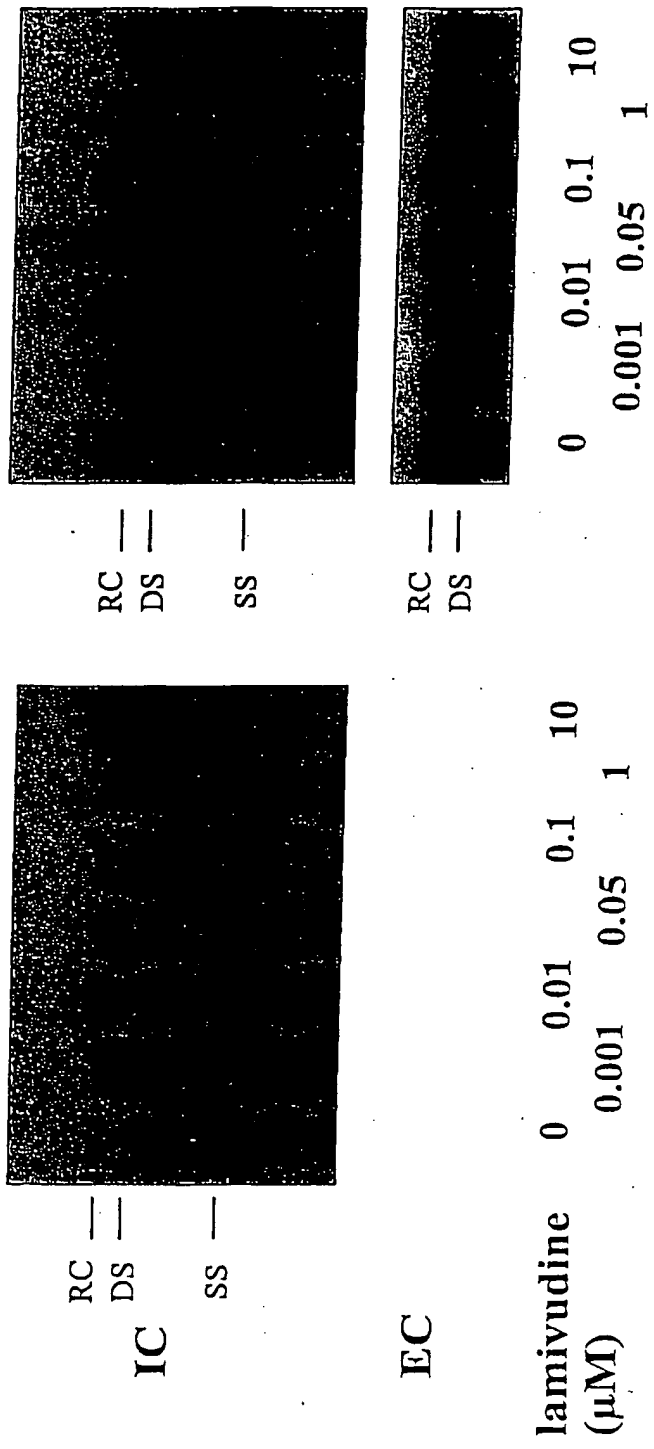


Figure 13D

M550I

Pre-core/M550I

RC	—
DS	—
SS	—

FC

**Famciclovir
(μM)**

0 5 50 500
1 10 100

0 5 10 50 100 500

Figure 13E

00000001 1000001

Pre-core/L526M/M550V

L526M/M550V

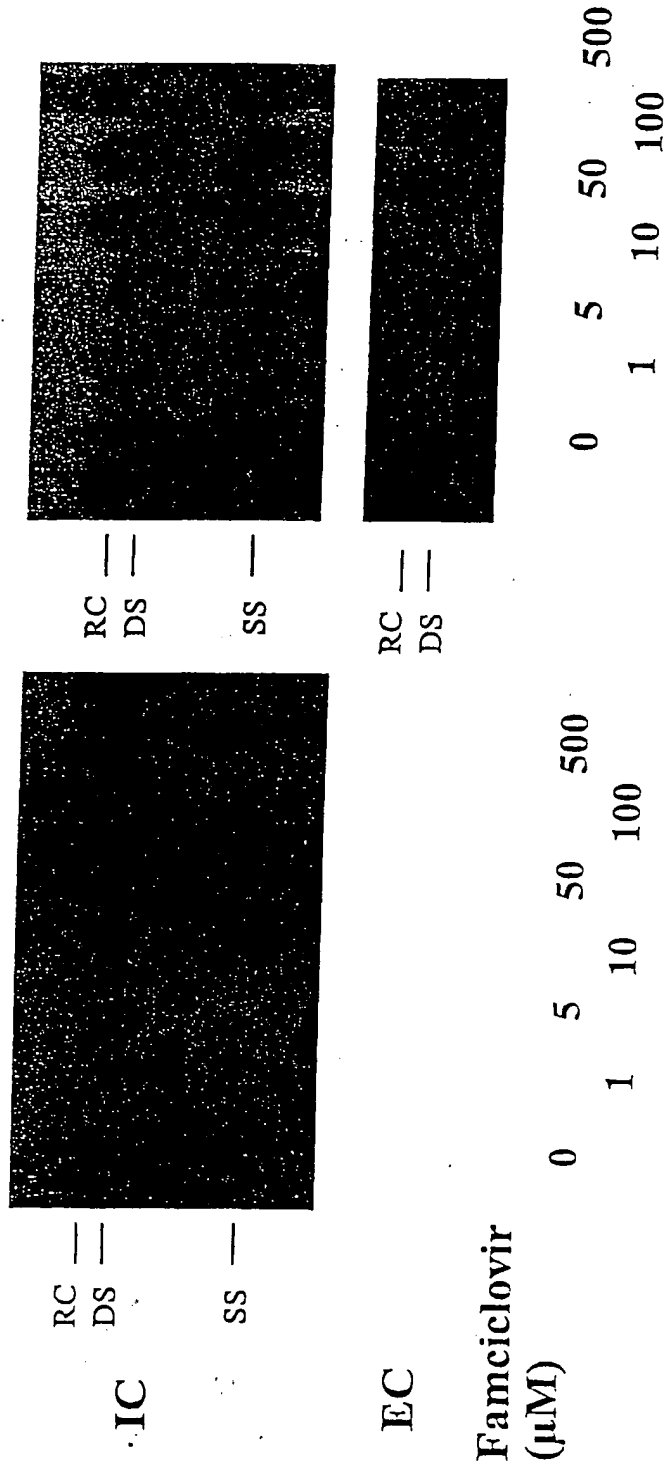


Figure 13F